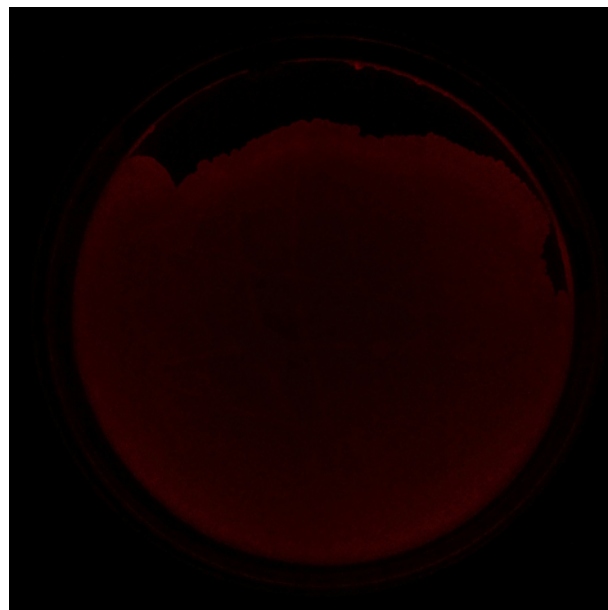| RFP plate	GFP plate

RFP toplight preset

Emission filter: 630 nm
Excitation wavelength: 525 nm
Rel. exposure length: 150 units
Illumination from top of sample
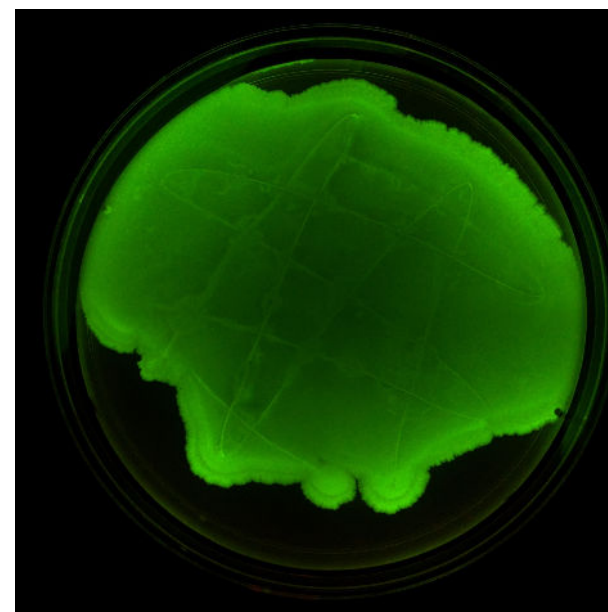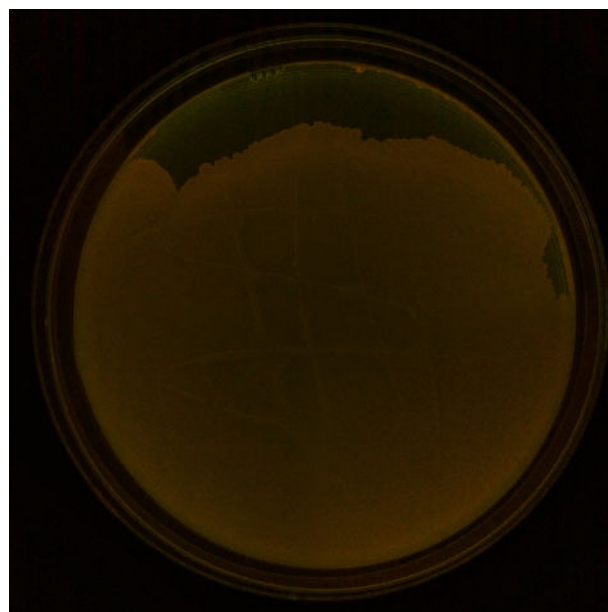with black background
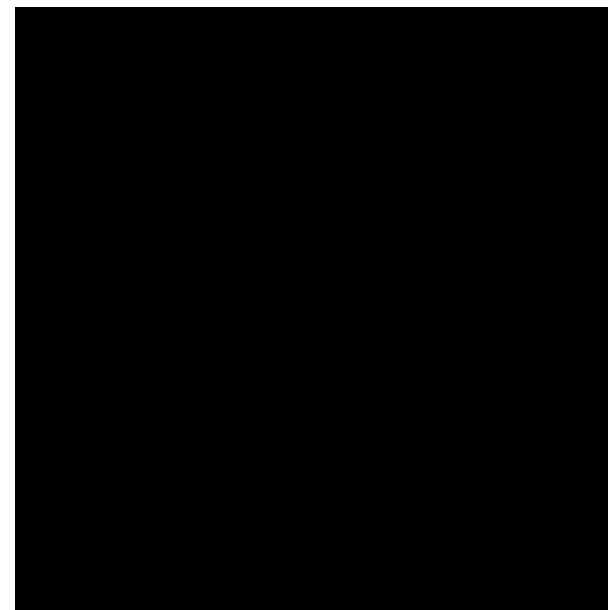
GFP toplight preset

Emission filter: 530 nm
Excitation wavelength: 465 nm
Rel. exposure length: 15 units
Illumination from top of sample
with black background

Up to 3 filters can be installed in each robot – standard configuration shown to the left (setup for red and green fluorescent proteins leaving one filter slot empty).

Measurements are relative unless a known reference ladder is also imaged and used to normalize intensity.

The signal to noise ratio and overall sensitivity is dependent on a multitude of factors including colony density and specific protein excitation/emission.

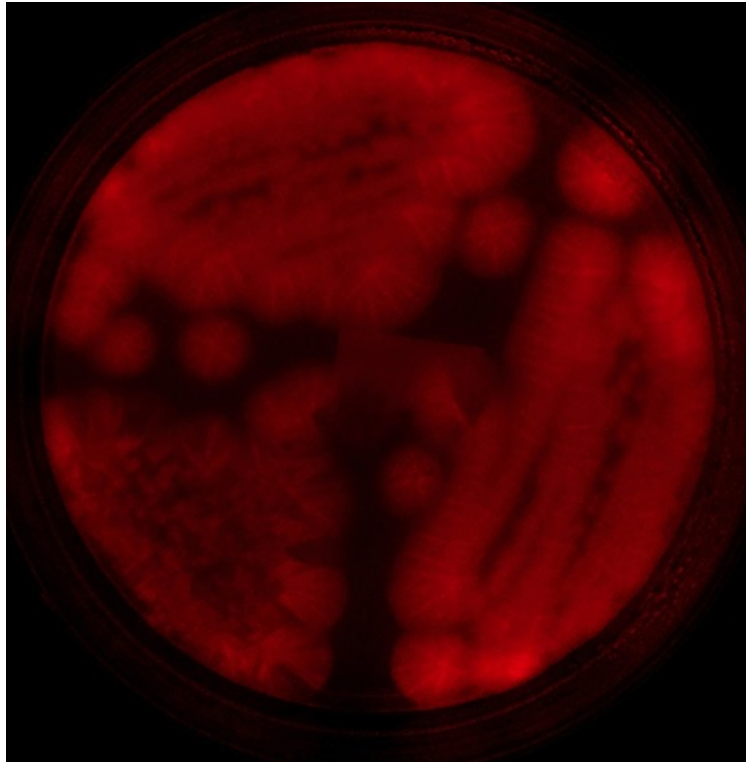Filters can be customized to suit specific emission wavelengths.

Available excitation wavelengths are:
858nm
622nm
573nm
528nm
470nm
415nm

Reference ladder with transformants expressing increasing levels of GFP from left to right captured with the same exposure time
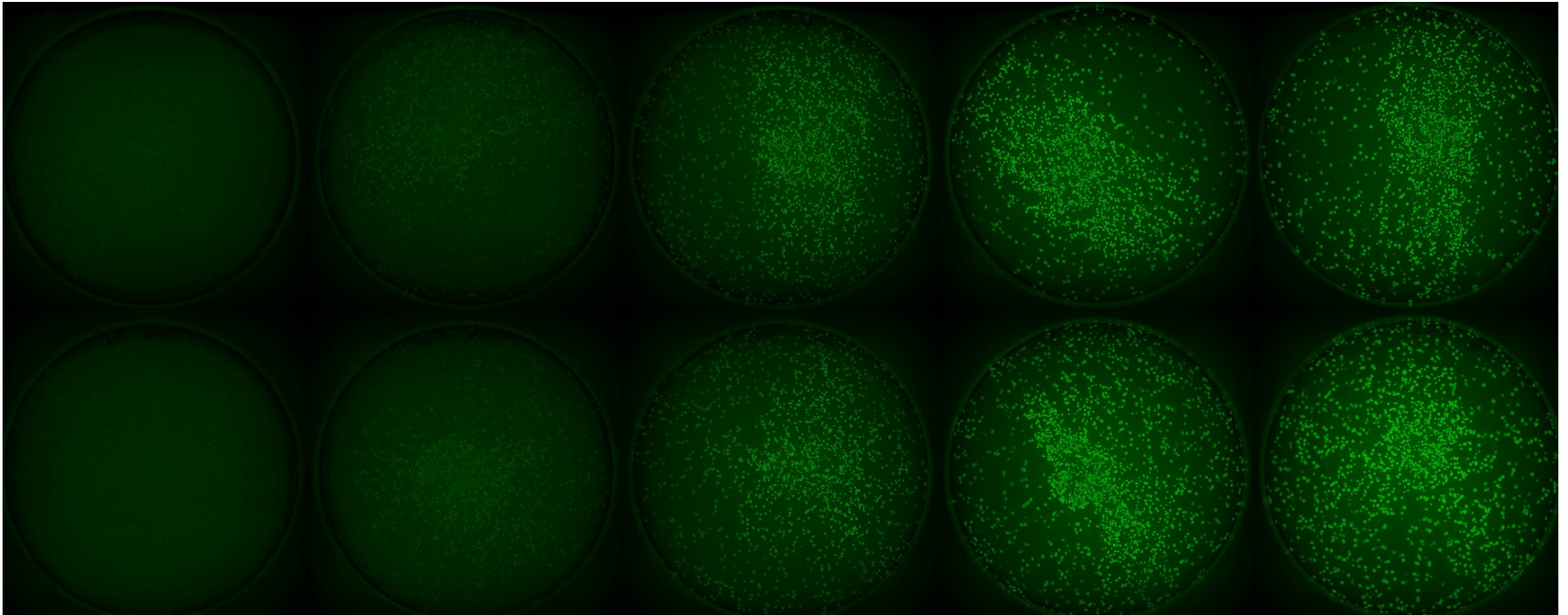
3 different fungal transformant strains expressing RFP streaked on a plate

Exposure can be increased after image capture to bring out the signal for visual assessment even if it is not immediately visible in the raw image